

ABSTRACT

Present processes used for planarizing a cavity filled with a coil and hard baked photoresist require that a significant amount of the thickness of the coils be removed. This increases the DC resistance of the coil. In the present invention a layer of alumina is deposited onto the surface of the excess photoresist, following which CMP is initiated. The presence of the alumina serves to stabilize the photoresist so that it does not delaminate. CMP is terminated as soon as the coils are exposed, allowing their full thickness to be retained and resulting in minimum DC resistance. Application of this process to the manufacture of a two coil planar magnetic write head is described.